

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An optical scan module ~~constituted as~~ configured to ~~be a single integral solid body with a function for deflecting a light beam from a light emission source by a deflection unit to repeat scanning,~~ the optical scan module comprising:  
a holder configured to hold a ~~wherein the optical scan module has an arrangement in~~  
~~which the~~ light emission source, ~~the~~ a deflection unit, and terminals connected to a drive circuit for the light emission source or to a drive circuit for the deflection unit ~~are integrally fixed to a holder,~~ wherein the holder is further configured ~~formed~~ with an exterior facing abutment portion configured to be brought into abutment with ~~another~~ an exterior mounting member outside of the optical scan module ~~when mounted to the other member,~~ and wherein the terminals are configured to fix ~~constitute a mounting unit for mounting~~ the holder to the exterior mounting ~~other~~ member.

Claim 2 (Currently Amended): The optical scan module according to claim 1, wherein the optical scan module further comprises a frame having a heat radiation plate projecting outside an outline of the holder, and the light emission source is joined to the heat radiation plate.

Claim 3 (Original): The optical scan module according to claim 1, wherein the holder is applied with at least one of the light emission source and the drive circuit for the light emission source.

Claim 4 (Currently Amended): The optical scan module according to claim 1, wherein a focus unit and the holder are integrally provided, and ~~so that the~~ scanning is

allowed with a width corresponding to  $1/k$ ,  $k$  is a positive integer, of a paper sheet width of a standard size.

Claim 5 (Currently Amended): An optical scan module comprising a light emission source and a deflection unit ~~which deflects~~ configured to deflect a light beam from the light emission source to repeat scanning,

wherein the optical scan module ~~has~~ further includes a holder provided with electrodes ~~for~~ configured to provide electrical wiring to the light emission source and the deflection unit and configured ~~for holding~~ to hold a movable portion of the deflection unit and a sealing substrate ~~to be~~ provided together with the holder in a ~~piled~~ stacked relationship and configured to envelop and seal the light emission source and the movable portion of the deflection unit ~~are enveloped to be tight closed therebetween the holder and the sealing substrate.~~

Claim 6 (Currently Amended): The optical scan module according to claim 5, wherein a light source portion substrate ~~applied~~ configured to hold at least with the light emission source and a monitor unit ~~which detects~~ configured to detect a light quantity of light beam from the light emission source, the light source portion substrate also being configured to be ~~is provided in a piled relationship~~ between the holder and the sealing substrate.

Claim 7 (Currently Amended): The optical scan module according to claim 5, wherein a frame substrate integrally formed with a ~~fifth~~ first reflection unit ~~which conducts~~ configured to conduct a light beam from the light emission source to the deflection unit is configured to be provided in a piled relationship between the electrode substrate and the sealing substrate.

Claim 8 (Currently Amended): The optical scan module according to claim 5, further comprising a second reflection unit ~~which injects~~ configured to project a light beam deflection-scanned by the deflection unit~~[[,]]~~ in a direction non-parallel to a lamination surface.

Claim 9 (Currently Amended): The optical scan module according to claim 8, wherein a frame substrate ~~for enveloping~~ configured to envelop the movable portion of the deflection unit is configured to be provided ~~in a piled relationship~~ between the holder ~~or the electrode substrate~~ and the sealing substrate, and the second reflection unit is integrally formed on the frame substrate.

Claim 10 (Currently Amended): The optical scan module according to claim ~~[[9]]~~ 8, wherein ~~in place of the frame substrate a frame~~ the sealing substrate ~~envelopes~~ is configured to envelop the movable portion of the deflection unit, and the second reflection unit is integrally provided with a focus unit disposed between the light emission source and the deflection unit.

Claim 11 (Currently Amended): The optical scan module according to claim 8, wherein a scan lens ~~for focusing on a scanned surface~~ configured to focus the light beam deflection-scanned by the deflection unit onto a scanned surface is provided in part on the holder or the sealing substrate.

Claim 12 (Original): The optical scan module according to claim 11, wherein the scan lens is integrally provided in part with a focus unit disposed between the light emission source and the deflection unit.

Claim 13 (Currently Amended): The optical scan module according to claim 5, wherein the optical scan module further comprises a frame having a heat radiation plate projecting outside an outline of the holder, and the light emission source is joined to the heat radiation plate.

Claim 14 (Currently Amended): The optical scan module according to claim 5, wherein the holder is ~~applied with~~ configured to hold at least one of the light emission source and the drive circuit for the light emission source.

Claim 15 (Currently Amended): The optical scan module according to claim 5, wherein a focus unit and the holder are integrally provided, and so that the scanning is allowed with a width corresponding to  $1/k$ , ~~[[()]]~~  $k$  is a positive integer~~[[()]]~~, of a paper sheet width of a standard size.

Claim 16 (Currently Amended): An optical scan module comprising a light emission source and a deflection unit ~~which deflects~~ configured to deflect a light beam from the light emission source to repeat scanning,

wherein, ~~on~~ the optical scan module further includes an electrode substrate ~~for provision of~~ configured to provide support for electrodes connected to the light emission source and the deflection unit and to support a bearing of the deflection unit, a light source portion substrate ~~applied with~~ configured to support the light emission source and a monitor

unit ~~which detects~~ configured to detect a light quantity of light beam from the light emission source, and a deflection portion substrate ~~for holding~~ configured to hold a movable portion of the deflection unit, the electrode substrate, the light source portion substrate and the deflection portion substrate being stacked together ~~are piled~~ and sealed with a sealing substrate, whereby at least the light emission source and the movable portion of the deflection unit are enveloped and tight-closed.

Claim 17 (Currently Amended): The optical scan module according to claim 16, wherein a frame substrate integrally formed with a ~~fifth~~ first reflection unit ~~which conducts~~ configured to conduct a light beam from the light emission source to the deflection unit is provided ~~in a piled relationship~~ between the electrode substrate and the sealing substrate.

Claim 18 (Currently Amended): The optical scan module according to claim 16, further comprising a second reflection unit ~~which injects~~ configured to project a light beam deflection-scanned by the deflection unit[[,]] in a direction non-parallel to a lamination surface.

Claim 19 (Currently Amended): The optical scan module according to claim 18, wherein a frame substrate ~~for enveloping~~ configured to envelop the movable portion of the deflection unit is provided ~~in a piled relationship~~ between ~~the holder or~~ the electrode substrate and the sealing substrate, and the second reflection unit is integrally formed on the frame substrate.

Claim 20 (Currently Amended): The optical scan module according to claim [[19]] 18, wherein ~~in place of the frame substrate a frame~~ the sealing substrate envelopes is

configured to envelop the movable portion of the deflection unit, and the second reflection unit is integrally provided with a focus unit disposed between the light emission source and the deflection unit.

Claim 21 (Currently Amended): The optical scan module according to claim 18, wherein a scan lens ~~for focusing on a scanned surface~~ configured to focus the light beam deflection-scanned by the deflection unit onto a scanned surface is provided in part on the holder or the sealing substrate.

Claim 22 (Original): The optical scan module according to claim 21, wherein the scan lens is integrally provided in part with a focus unit disposed between the light emission source and the deflection unit.

Claim 23 (Currently Amended): The optical scan module according to claim 16, wherein the optical scan module further comprises a frame having a heat radiation plate projecting outside an outline of the holder, and the light emission source is joined to the heat radiation plate.

Claim 24 (Currently Amended): The optical scan module according to claim 16, wherein the ~~holder~~ electrode substrate is ~~applied with~~ configured to hold at least one of the light ~~emission~~ source ~~and the portion substrate or a~~ drive circuit for the light emission source.

Claim 25 (Currently Amended): The optical scan module according to claim 16, wherein a focus unit and the ~~holder~~ electrode substrate are integrally provided so that the

scanning is allowed with a width corresponding to  $1/k$ ,  $k$  is a positive integer, of a paper sheet width of a standard size.

Claim 26 (Currently Amended): An optical scanner comprising ~~an~~ a plurality of optical scan ~~module~~ modules fixed on ~~another member~~ an external circuit substrate,

~~the each~~ optical scan module ~~constituted~~ being configured as a single integral solid body ~~with a function for deflecting a light beam from~~ including a light emission source ~~by~~ and a deflection unit configured to deflect a light beam from the light emission source to perform repeat scanning,

wherein ~~the each~~ optical scan module ~~has an arrangement in which~~ further includes the light emission source, the deflection unit, and terminals connected to a drive circuit for the light emission source or a drive circuit for the deflection unit ~~are~~ being integrally fixed to a holder, the holder ~~is formed with~~ being configured to have an exterior facing abutment portion configured to be brought into abutment with the external circuit substrate ~~another member when mounted to the other member~~, and the terminals constitute a mounting unit for mounting being configured to fix the holder to the external circuit substrate ~~other member~~,

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate which is constituted as the other member and identical to that formed with the light emission source and the deflection unit.~~

Claim 27 (Currently Amended): The optical scanner according to claim 26, wherein a the plurality of optical scan modules are ~~provided, and a respective optical scan module is~~ positioned ~~to be fixed~~ on the ~~identical~~ external circuit substrate, ~~with the abutment portion abutting thereon, so that their~~ to provide respective relative inclinations ~~are adjusted to have~~ of said plurality of optical scan modules in an aligned scan direction.

Claim 28 (Currently Amended): The optical scanner according to claim 27, wherein the plurality of optical scan modules are positioned ~~to be fixed, with the abutment portions brought into abutment~~ on the ~~identical~~ external circuit substrate, ~~so that their~~ to provide respective relative positions of said plurality of scan modules are adjusted in a subsidiary scan direction perpendicular to the scan direction.

Claim 29 (Currently Amended): The optical scanner according to claim 26, further comprising ~~one or two or more~~ a photo detection unit ~~which detects~~ configured to detect a scan start end and a scan finish end defined by light projected from the ~~each~~ respective optical scan module.

Claim 30 (Currently Amended): The optical scanner according to claim 29, further comprising a measurement unit ~~which measures~~ configured to measure a variation of occurrence timing between a photo detection signal of light at a scan finish end by light of the respective optical scan module and a detection signal at a scan start end by light of a neighboring optical scan module on the side of the scan finish end.

Claim 31 (Currently Amended): The optical scanner according to claim 26, wherein focus elements adapted ~~for~~ to focus light projected from the plurality of optical scan modules ~~to be focused on~~ onto a scanned surface at least in a subsidiary scan direction perpendicular to the scan direction are continuously and integrally provided in an array direction of the optical scan modules.



Claim 32 (Currently Amended): The optical scanner according to claim 31, wherein a scan width restriction unit ~~which restricts~~ configured to restrict respective scan widths by light of the plurality of optical scan modules is disposed in a light path from ~~the deflection unit~~ each optical scan module to the focus elements.

Claim 33 (Currently Amended): The optical scanner according to claim 32, wherein the scan width restriction unit comprises a plurality of reflective ~~member~~ members, and a each reflected light beam is detected by at least one of a plurality of sensors making up the photo detection unit.

Claim 34 (Currently Amended): The optical scanner according to claim 26, further comprising a plurality of buffer ~~unit which~~ units configured to temporally ~~stores~~ store image data in correspondence to the plurality of optical scan modules, a switch unit ~~which divides~~ configured to divide a single line of image data for allotment to ~~the~~ each respective optical scan module to effect distribution to a respective corresponding buffer unit, and a count unit ~~which counts~~ configured to count a number of allotted image data.

Claim 35 (Currently Amended): The optical scanner according to claim 34, wherein, for the each respective optical scan module, a detection enable interval is provided every line ~~by using as a trigger~~ based on a synchronism detection signal of a neighboring optical scan module on a scan start side, and a reading control of image data from the corresponding buffer unit is executed ~~simply by use of~~ based on a detection signal detected in the detection enable interval.

Claim 36 (Currently Amended): The optical scanner according to claim 34, wherein ~~the~~ each respective optical scan module has a phase control unit ~~which controls~~ configured to control a phase of a rotation speed reference signal applied to the deflection unit, ~~and so that~~ the synchronism detection signal of the respective optical scan module is detected at least with a delay from the synchronism detection signal of a neighboring optical scan module on a scan start side.

Claim 37 (Currently Amended): The optical scanner according to claim 34, wherein ~~the~~ each respective optical scan module has a detection position control unit ~~which controls~~ configured to control a principal scan position of an incident beam to the photo detection unit, ~~and so that~~ the synchronism detection signal of the respective optical scan module is detected at least with a delay from the synchronism detection signal of a neighboring optical scan module on a scan start side.

Claim 38 (Currently Amended): The optical scanner according to claim 36, wherein the plurality of optical scan modules and the photo detection unit ~~detecting~~ configured to detect the synchronism detection signal are integrally held on the ~~identical~~ external circuit substrate.

Claim 39 (Currently Amended): An optical scanner comprising ~~an~~ a plurality of optical scan ~~module~~ modules fixed on an external circuit substrate ~~another member~~,  
the plurality of optical scan ~~module~~ modules each including a light emission source and a deflection unit ~~which deflects~~ configured to deflect a light beam from the light emission source to repeat scanning,

wherein ~~the each~~ optical scan module ~~has~~ includes a holder ~~provided with configured~~  
to hold a movable portion of the deflection unit and to provide electrodes for electrical wiring  
to the light emission source and the deflection unit ~~and configured for holding a movable~~  
~~portion of the deflection unit~~, and a sealing substrate, ~~to be provided together with the holder~~  
and the sealing substrate together being configured to envelop and seal in a piled relationship,  
and the light emission source and the movable portion of the deflection unit ~~are enveloped to~~  
~~be tight closed between the holder and the sealing substrate~~,

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate~~  
~~which is constituted as the other member and identical to that formed with the light emission~~  
~~source and the deflection unit.~~

Claim 40 (Currently Amended): The optical scanner according to claim 39, wherein  
a the plurality of optical scan modules are provided, ~~and a respective optical scan module is~~  
positioned ~~to be fixed~~ on the identical external circuit substrate[[,]] ~~with the abutment portion~~  
~~abutting thereon[[,]] so that their~~ to provide respective relative inclinations ~~are adjusted to~~  
~~have of said plurality of optical scan modules in~~ an aligned scan direction.

Claim 41 (Currently Amended): The optical scanner according to claim 40, wherein  
the plurality of optical scan modules are positioned ~~to be fixed~~, ~~with the abutment portions~~  
~~brought into abutment~~ on the external identical circuit substrate[[,]] ~~so that their~~ to provide  
respective relative positions of said plurality of scan modules ~~are~~ adjusted in a subsidiary  
scan direction perpendicular to the scan direction.

Claim 42 (Currently Amended): The optical scanner according to claim 39, further  
comprising ~~one or two or more~~ a photo detection unit ~~which detects~~ configured to detect a

scan start end and a scan finish end defined by light projected from ~~the~~ each respective optical scan module.

Claim 43 (Currently Amended): The optical scanner according to claim 42, further comprising a measurement unit ~~which measures~~ configured to measure a variation of occurrence timing between a photo detection signal of light at a scan finish end by light of the respective optical scan module and a detection signal at a scan start end by light of a neighboring optical scan module on the side of the scan finish end.

Claim 44 (Currently Amended): The optical scanner according to claim 39, wherein focus elements adapted to focus ~~for~~ light projected from the plurality of optical scan modules ~~to be focused on onto~~ a scanned surface at least in a subsidiary scan direction perpendicular to the scan direction are continuously and integrally provided in an array direction of the optical scan modules.

Claim 45 (Currently Amended): The optical scanner according to claim 44, wherein a scan width restriction unit configured to restrict ~~which restricts~~ respective scan widths by light of the plurality of optical scan modules is disposed in a light path from each optical scan module ~~the deflection unit~~ to the focus elements.

Claim 46 (Currently Amended): The optical scanner according to claim 45, wherein the scan width restriction unit comprises a plurality of reflective ~~member~~ members, and a each reflected light beam is detected by at least one of a plurality of sensors making up the photo detection unit.

Claim 47 (Currently Amended): The optical scanner according to claim 39, further comprising a plurality of buffer units configured to ~~unit which~~ temporally ~~stores~~ store image data in correspondence to the plurality of optical scan modules, a switch unit configured to divide ~~which divides~~ a single line of image data for allotment to ~~the~~ each respective optical scan module to effect distribution to a respective corresponding buffer unit, and a count unit ~~which counts~~ configured to count a number of allotted image data.

Claim 48 (Currently Amended): The optical scanner according to claim 47, wherein, for the each respective optical scan module, a detection enable interval is provided every line ~~by using as a trigger~~ based on a synchronism detection signal of a neighboring optical scan module on a scan start side, and a reading control of image data from the corresponding buffer unit is executed ~~simply by use of~~ based on a detection signal detected in the detection enable interval.

Claim 49 (Currently Amended): The optical scanner according to claim 47, wherein the each respective optical scan module has a phase control unit ~~which controls~~ configured to control a phase of a rotation speed reference signal applied to the deflection unit ~~so that~~ , and the synchronism detection signal of the respective optical scan module is detected at least with a delay from the synchronism detection signal of a neighboring optical scan module on a scan start side.

Claim 50 (Currently Amended): The optical scanner according to claim 47, wherein the each respective optical scan module has a detection position control unit ~~which controls~~ configured to control a principal scan position of an incident beam to the photo detection unit ~~so that~~ , and the synchronism detection signal of the optical scan module is detected at least

with a delay from the synchronism detection signal of a neighboring optical scan module on a scan start side.

Claim 51 (Currently Amended): The optical scanner according to claim 49, wherein the plurality of optical scan modules and the photo detection unit ~~detecting~~ configured to detect the synchronism detection signal are integrally held on the ~~identical~~ external circuit substrate.

Claim 52 (Currently Amended): An optical scanner comprising ~~an~~ a plurality of optical scan ~~module~~ modules fixed on an external circuit substrate ~~another member~~,

~~the each~~ optical scan module including a light emission source and a deflection unit ~~which deflects~~ configured to deflect a light beam from the light emission source to repeat scanning,

wherein, each optical scan module further includes ~~on~~ an electrode substrate configured to provide support for ~~for provision of~~ electrodes connected to the light emission source and the deflection unit and to support a bearing of the deflection unit, a light source portion substrate configured to support ~~applied with~~ the light emission source and a monitor unit configured to detect ~~which detects~~ a light quantity of light beam from the light emission source, and a deflection portion substrate configured to hold ~~for holding~~ a movable portion of the deflection unit, the electrode substrate, light source portion substrate, and the deflection portion substrate being stacked together ~~are piled~~ and sealed with a sealing substrate, whereby at least the light emission source and the movable portion of the deflection unit are enveloped and tight-closed[[,]]

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate which is constituted as the other member and identical to that formed with the light emission source and the deflection unit.~~

Claim 53 (Currently Amended): The optical scanner according to claim 52, wherein a the plurality of optical scan modules are ~~provided, and a respective optical scan module is~~ positioned ~~to be fixed~~ on the ~~identical~~ external circuit substrate~~[[,]]~~ with the ~~abutment portion abutting thereon[[,]]~~ so that their to provide respective relative inclinations ~~are adjusted to have of said plurality of optical scan modules in~~ an aligned scan direction.

Claim 54 (Currently Amended): The optical scanner according to claim 53, wherein the plurality of optical scan modules are positioned ~~to be fixed, with the abutment portions brought into abutment~~ on the ~~identical~~ external circuit substrate~~[[,]]~~ so that their to provide respective relative positions ~~are of said plurality of scan modules~~ adjusted in a subsidiary scan direction perpendicular to the scan direction.

Claim 55 (Currently Amended): The optical scanner according to claim 52, further comprising ~~one or two or more~~ a photo detection unit ~~which detects~~ configured to detect a scan start end and a scan finish end defined by light projected from the each respective optical scan module.

Claim 56 (Currently Amended): The optical scanner according to claim 55, further comprising a measurement unit ~~which measures~~ configured to measure a variation of occurrence timing between a photo detection signal of light at a scan finish end by light of the

respective optical scan module and a detection signal at a scan start end by light of a neighboring optical scan module on the side of the scan finish end.

Claim 57 (Currently Amended): The optical scanner according to claim 52, wherein focus elements adapted ~~for~~ to focus light projected from the plurality of optical scan modules ~~to be focused on onto~~ a scanned surface at least in a subsidiary scan direction perpendicular to the scan direction are continuously and integrally provided in an array direction of the optical scan modules.

Claim 58 (Currently Amended): The optical scanner according to claim 57, wherein a scan width restriction unit ~~which restricts~~ configured to restrict respective scan widths by light of the plurality of optical scan modules is disposed in a light path from ~~the deflection unit~~ each optical scan module to the focus elements.

Claim 59 (Currently Amended): The optical scanner according to claim 58, wherein the scan width restriction unit comprises a plurality of reflective ~~member~~ members, and a each reflected light beam is detected by at least one of a plurality of sensor making up the photo detection unit.

Claim 60 (Currently Amended): The optical scanner according to claim 52, further comprising a plurality of buffer ~~unit which~~ units configured to temporally ~~stores~~ store image data in correspondence to the plurality of optical scan modules, a switch unit ~~which divides~~ configured to divide a single line of image data for allotment to ~~the~~ each respective optical scan module to effect distribution to a respective corresponding buffer unit, and a count unit ~~which counts~~ configured to count a number of allotted image data.



Claim 61 (Currently Amended): The optical scanner according to claim 60, wherein, for ~~the~~ each respective optical scan module, a detection enable interval is provided every line ~~by using as a trigger~~ based on a synchronism detection signal of a neighboring optical scan module on a scan start side, and a reading control of image data from the corresponding buffer unit is executed ~~simply by use of~~ based on a detection signal detected in the detection enable interval.

Claim 62 (Currently Amended): The optical scanner according to claim 60, wherein each ~~the~~ respective optical scan module has a phase control unit ~~which controls~~ configured to control a phase of a rotation speed reference signal applied to the deflection unit, and so that the synchronism detection signal of the respective optical scan module is detected at least with a delay from the synchronism detection signal of a neighboring optical scan module on a scan start side.

Claim 63 (Currently Amended): The optical scanner according to claim 60, wherein each ~~the~~ respective optical scan module has a detection position control unit ~~which controls~~ configured to control a principal scan position of an incident beam to the photo detection unit, and so that the synchronism detection signal of the respective optical scan module is detected at least with a delay from the synchronism detection signal of a neighboring optical scan module on a scan start side.

Claim 64 (Currently Amended): The optical scanner according to claim 62, wherein the plurality of optical scan modules and the photo detection unit configured to detect

~~detecting~~ the synchronism detection signal are integrally held on the ~~identical~~ external circuit substrate.

Claim 65 (Currently Amended): An optical scanner in which an ~~identical~~ external substrate has arrayed thereon a plurality of optical scan modules, each optical scan module including ~~constituted with~~ optical systems which have a light emission source and a deflector ~~for deflecting~~ configured to deflect a light beam from the light emission source to repeat a scanning and ~~which are~~ being configured to be accommodated in an identical holder frame, wherein the deflector is disposed at a position spaced at a predetermined distance from a position where a loop of vibration occurs when the substrate vibrates.

Claim 66 (Currently Amended): The optical scanner according to claim 65, wherein the optical scan modules are arrayed on the ~~identical~~ external substrate ~~with~~ in an aligned light beam scan direction.

Claim 67 (Currently Amended): An optical scanner in which an ~~identical~~ external substrate has arrayed thereon a plurality of optical scan modules, each optical scan module including ~~constituted with~~ optical systems which have a light emission source and a deflector configured to deflect ~~for deflecting~~ a light beam from the light emission source to repeat a scanning and ~~which are~~ the optical systems being configured to be accommodated in an identical holder frame, wherein the deflector is disposed at a position where a node of vibration occurs when the substrate vibrates, or in a vicinity of the node.

Claim 68 (Currently Amended): The optical scanner according to claim 67, wherein the optical scan modules are arrayed on the ~~identical~~ external substrate ~~with in~~ in an aligned light beam scan direction.

Claim 69 (Currently Amended): An optical scanner in which an ~~identical~~ external substrate has arrayed thereon a plurality of optical scan modules, each optical scan module including ~~constituted with~~ optical systems which have a light emission source and a deflector ~~for deflecting~~ configured to deflect a light beam from the light emission source to repeat a scanning and ~~which are~~ the optical systems being configured to be accommodated in an identical holder frame, wherein the optical scan modules are arrayed on the substrate asymmetrically to each other.

Claim 70 (Currently Amended): The optical scanner according to claim 69, wherein the optical scan modules are arrayed on the ~~identical~~ external substrate ~~with in~~ in an aligned light beam scan direction.

Claim 71 (Currently Amended): An optical scan method, ~~wherein, on~~ including providing a plurality of k, k is a positive integer, optical scan modules in a principal scan direction, correcting the scan width of a k-th optical scan module, has a record width thereof corrected to perform an optical scan, by combination of said correcting step including combining a variation up to a scan finish end detection relative to a record finish end position by the k-th optical scan module and a variation up to a record start end position relative to a scan start end detection by a (k+1) -th optical scan module.

Claim 72 (Currently Amended): An image generator in which a latent image is formed by irradiation of light from an optical writing unit on a uniformly charged photo-sensitive body and changed to a visible image to be transferred on a record medium to have a recorded image,

wherein the optical writing unit ~~is~~ includes an optical scanner comprising ~~an a~~ plurality of optical scan ~~module~~ modules fixed on ~~another~~ an exterior member,

~~the wherein each~~ optical scan module ~~constituted~~ is configured as a single integral solid body ~~with a function for deflecting a light beam from~~ including a light emission source ~~by and~~ a deflection unit configured to deflect a light beam from the light emission source to perform repeat scanning, and

wherein ~~the each~~ optical scan module ~~has an arrangement in which~~ further includes the light emission source, the deflection unit, and terminals connected to a drive circuit for the light emission source or a drive circuit for the deflection unit ~~are being~~ being integrally fixed to a holder, the holder ~~is formed with~~ being configured to have an exterior facing abutment portion configured to be brought into abutment with ~~another~~ the exterior member ~~when mounted to the other member~~, and the terminals ~~constitute a mounting unit for mounting~~ being configured to fix the holder to the ~~other~~ exterior member[[,]]

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate which is constituted as the other member and identical to that formed with the light emission source and the deflection unit.~~

Claim 73 (Currently Amended): An image generator in which a latent image is formed by irradiation of light from an optical writing unit on a uniformly charged photo-sensitive body and changed to a visible image to be transferred on a record medium to have a recorded image,

wherein the optical writing unit ~~is~~ includes an optical scanner comprising ~~an a~~  
plurality of optical scan ~~module~~ modules fixed on ~~another~~ an exterior member,

~~the wherein each~~ optical scan module ~~including~~ includes a light emission source and a  
deflection unit ~~which deflects~~ configured to deflect a light beam from the light emission  
source to repeat scanning,

wherein ~~the each~~ optical scan module has further includes a holder ~~provided with~~  
configured to hold a movable portion of the deflector unit and to provide electrodes for  
electrical wiring to the light emission source and the deflection unit ~~and configured for~~  
~~holding a movable portion of the deflection unit~~[[,]] and a sealing substrate, the holder and  
the sealing substrate together being configured to envelop and seal ~~to be provided together~~  
~~with the holder in a piled relationship~~[[,]] and at least the light emission source and the  
movable portion of the deflection unit ~~are enveloped to be tight closed between the holder~~  
~~and the sealing substrate,~~

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate~~  
~~which is constituted as the other member and identical to that formed with the light emission~~  
~~source and the deflection unit.~~

Claim 74 (Currently Amended): An image generator in which a latent image is  
formed by irradiation of light from an optical writing unit on a uniformly charged photo-  
sensitive body and changed to a visible image to be transferred on a record medium to have a  
recorded image,

wherein the optical writing unit ~~is~~ includes an optical scanner comprising ~~an a~~  
plurality of optical scan ~~module~~ modules fixed on ~~another~~ an exterior member,

~~the wherein each~~ optical scan module ~~including~~ includes a light emission source and a deflection unit ~~which deflects~~ configured to deflect a light beam from the light emission source to repeat scanning,

wherein, ~~on each optical scan module further includes~~ an electrode substrate ~~for provision of~~ configured to provide support for electrodes connected to the light emission source and the deflection unit and to support a bearing of the deflection unit, a light source portion substrate ~~applied with~~ configured to support the light emission source and a monitor unit ~~which detects~~ configured to detect a light quantity of light beam from the light emission source, and a deflection portion substrate ~~for holding~~ configured to hold a movable portion of the deflection unit, the electrode substrate, light source portion substrate, and the deflection portion substrate being stacked together ~~are piled~~ and sealed with a sealing substrate, whereby at least the light emission source and the movable portion of the deflection unit are enveloped and tight-closed[[,]]

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate which is constituted as the other member and identical to that formed with the light emission source and the deflection unit.~~

Claim 75 (Currently Amended): An image reader comprising a placement unit ~~for placing~~ configured to place a readable text thereon, a scan unit ~~which scans~~ configured to project scanning light onto the text on the ~~place~~ placement unit, and a read unit ~~which reads~~ configured to receive the light projected from the scan unit ~~and reflected on after interaction with~~ the text on the ~~place~~ placement unit,

wherein the ~~optical-writing scan~~ unit is an optical scanner comprising ~~an~~ a plurality of optical scan ~~module~~ modules fixed on ~~another~~ an exterior member,

~~the wherein each~~ optical scan module ~~constituted~~ being configured as a single integral solid body ~~with a function for deflecting a light beam from~~ including a light emission source ~~by and~~ a deflection unit configured to deflect a light beam from the light emission source to perform repeat scanning, and

wherein ~~the each~~ optical scan module ~~has an arrangement in which~~ further includes the light emission source, the deflection unit, and terminals connected to a drive circuit for the light emission source or a drive circuit for the deflection unit ~~are~~ being integrally fixed to a holder, the holder ~~is formed with~~ being configured to have an exterior facing abutment portion configured to be brought into abutment with ~~another~~ the exterior member ~~when mounted to the other member,~~ and the terminals ~~constitute a mounting unit for mounting~~ being configured to fix the holder to the ~~other~~ exterior member[[,] ]

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate which is constituted as the other member and identical to that formed with the light emission source and the deflection unit.~~

Claim 76 (Currently Amended): An image reader comprising a placement unit ~~for placing~~ configured to place a readable text thereon, a scan unit ~~which scans~~ configured to project scanning light onto the text on the ~~place~~ placement unit, and a read unit ~~which reads~~ configured to receive the light projected from the scan unit and reflected on after interaction with the text on the ~~place~~ placement unit,

wherein the ~~optical writing~~ scan unit is an optical scanner comprising ~~an~~ a plurality of optical scan ~~module~~ modules fixed on another an exterior member,

~~the~~ wherein each optical scan module ~~including~~ includes a light emission source and a deflection unit which deflects a light beam from the light emission source to repeat scanning,

wherein ~~the~~ each optical scan module ~~has~~ further includes a holder ~~provided with~~ configured to hold a movable portion of the deflector unit and to provide electrodes for electrical wiring to the light emission source and the deflection unit ~~and configured for holding a movable portion of the deflection unit~~[[,]] and a sealing substrate, the holder and the sealing substrate together being configured to envelop and seal ~~to be provided together with the holder in a piled relationship~~[[,]] and at least the light emission source and the movable portion of the deflection unit ~~are enveloped to be tight closed between the holder and the sealing substrate,~~

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate which is constituted as the other member and identical to that formed with the light emission source and the deflection unit.~~

Claim 77 (Currently Amended): An image reader comprising a placement unit ~~for placing~~ configured to place a readable text thereon, a scan unit ~~which scans~~ configured to project scanning light onto the text on the ~~place~~ placement unit, and a read unit ~~which reads~~ configured to receive the light projected from the scan unit and reflected on after interaction with the text on the ~~place~~ placement unit,

wherein the ~~optical writing~~ scan unit is an optical scanner comprising ~~an~~ a plurality of optical scan ~~module~~ modules fixed on ~~another~~ an exterior member,

~~the~~ wherein each optical scan module ~~including~~ includes a light emission source and a deflection unit ~~which deflects~~ configured to deflect a light beam from the light emission source to repeat scanning,

wherein, ~~on~~ each optical scan module further includes an electrode substrate ~~for provision of~~ configured to provide support for electrodes connected to the light emission source and the deflection unit and to support a bearing of the deflection unit, a light source



portion substrate ~~applied with~~ configured to support the light emission source and a monitor unit ~~which detects~~ configured to detect a light quantity of light beam from the light emission source, and a deflection portion substrate ~~for holding~~ configured to hold a movable portion of the deflection unit, the electrode substrate, light source portion substrate, and the deflection portion substrate being stacked together ~~are piled~~ and sealed with a sealing substrate, whereby at least the light emission source and the movable portion of the deflection unit are enveloped and tight-closed[[,]]

~~wherein k units of optical scan modules are arranged to be fixed on a circuit substrate which is constituted as the other member and identical to that formed with the light emission source and the deflection unit.~~